

JD Enter Amendment 8/17/2007

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A rolling bearing comprising:
inner and outer rings having opposing, cooperating curved raceways and each ring having an inner and an outer diameter;
a plurality of rolling bodies arranged between the raceways for rolling along the raceways in a circumferential direction of the bearing rings and the rolling bodies also being movable in an axial direction of the bearing rings upon application of a force to the rings;
a plurality of strain gauge sensors arranged on at least one of the outer diameter of the outer ring and the inner diameter of the inner ring, wherein each of the strain gauge sensors comprises a plurality of circumferentially extending, conductor track sections arranged in a row of the sections in the axial direction of the bearing rings, and the lengths in the circumferential direction of two adjacent ones of the conductor track sections of the strain gauge sensor differ such that positions of the rolling bodies in the axial direction are detectable by the sensors.
2. (Previously Presented) The rolling bearing as claimed in claim 1, wherein the row of adjacent conductor track sections are so arranged with respect to each other and are of such lengths that together the sections define trapezoid in each of the plurality of sensors.
3. (Previously Presented) A rolling bearing comprising:
inner and outer rings having curved raceways and each ring having an inner and an outer diameter;
a plurality of rolling bodies arranged between the raceways for rolling along the raceways in a circumferential direction of the bearing rings and the rolling bodies also being movable in an axial direction of the bearing rings upon application of a force to the rings;
a plurality of sensors arranged on at least one of the outer diameter of the outer ring and the inner diameter of the inner ring, wherein a distance in the circumferential direction between

two circumferentially adjacent ones of the sensors on one of the rings varies in the axial direction such that positions of the rolling bodies in the axial direction are detectable by the sensors.

4. (Currently Amended) The rolling bearing as claimed in claim 3, further comprising a groove in the at least one of the outer diameter of the ~~inner~~ outer ring and the inner diameter of the ~~outer~~ inner ring and the sensors are arranged in the groove.

5. (Currently Amended) The rolling bearing as claimed in claim 1, further comprising a groove in the at least one of the outer diameter of the ~~inner~~ outer ring and the inner diameter of the ~~outer~~ inner ring and wherein the sensors are arranged in the groove.

6. (Previously Presented) The rolling bearing as claimed in claim 3, wherein the sensors comprise conductor track sections extending in the circumferential direction, the track sections being arrayed in rows in the axial direction, and the distance between two circumferentially adjacent sections varies in axially adjacent rows of the track sections.

7. (Previously Presented) The rolling bearing as claimed in claim 3, wherein the sensors comprise conductor track sections having a length and being oriented to extend in both the axial and the circumferential directions and the conductor track sections also being oriented such that two of the conductor track sections are spaced apart a varying distance at selected different axial locations on the bearing.